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NEW CROP VARIETIES

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Outlined here are descriptions of new varieties of certain field crops. The purpose is to provide the extension worker with reference information for his use until fuller descriptions appear as in USDA Technical Bulletins or in the Registration Service of the American Society of Agronomy.

Assembled by the Federal Extension Service with the cooperation of State Extension Agronomists and the Agricultural Research Service-USDA

Varieties Described

WHEAT	SAFFLOWER	BLUESTEM
Benhur	Ute	Aldous Little Bluestem
Blueboy		
Fortuna	ALFALFA	BROMEGRASS
Leeds	Caliverde 65	Polar
Lemhi 66	Mark II	
Sheridan	Mesa-Sirsa	INDIANGRASS
Sturdy	Washoe	Osage
OATS	WHITE CLOVER	ORCHARDGRASS
Arlington 23	Tillman	Pomar
Bingham		
Clintford	LESPEDEZA	RED FESCUE
Dawn	Yadkin	Arctared
Diana		
Mesa	BIRDSFOOT TREFOIL	CREEPING BENTGRASS
Nora	Dawn	Pennpar
Orbit		
Rapida	SWEET LUPINE	BLUEGRASS
Tyler	Rancher	Nugget Kentucky Bluegrass
Wyndmere		
	COTTON	CENTIPEDE GRASS
RICE	Blightmaster A-5	Oklawn
Dawn	Pima S-3	
Earlirose	Pima S-4	TALL WHEATGRASS
Nova 66		Jose
	SUGARCANE	
BUCKWHEAT	U.S. 59-16-1	
Pennquad		
SOYBEANS		
Hark		
Kino		
Wilson 6		

Inquiry about any variety described here should be directed to the State releasing it.

Wheat

Benhur is a soft red winter wheat characterized by resistance to two races of hessian fly and to some races of stem rust, new races of leaf rust, loose smut and soilborne mosaic. It is moderately resistant to powdery mildew. It was bred cooperatively by the Purdue Experiment Station and the Entomology and Crops Research Divisions, USDA. The new variety was derived from a series of complex crosses completed in 1957. It is very early, short strawed, lodging resistant and highly productive. Of particular interest is the resistance to race B of hessian fly which attacks the previously resistant Dual, Reed, Redcoat, and Monon varieties and resistance to new races of leaf rust that are attacking the previously resistant Monon and Knox 62.

Like other available varieties Benhur is susceptible to head scab, leaf and head Septoria diseases and to bunt.

Breeder seed was distributed to interested States in 1965. Foundation seed is being supplied to certified seed growers in Indiana this fall.

Blueboy is a soft red winter wheat that combines high yield, grain of very satisfactory milling and baking qualities and exceptionally stiff straw. Blueboy is rated also very responsive to nitrogen by the North Carolina Station where it was developed. With this combination of characters, the new variety is regarded as a possible key to a breakthrough in yields in the region. It appears to be well adapted to Virginia, the Carolinas, Georgia and central and northern Alabama and Mississippi.

As an average of North Carolina tests, Blueboy has outyielded the popular Wakeland variety by 35 percent. Its two-year yield average is 54.9 bushels. Percent of lodging last year was 1.6 compared with 27 for Wakeland, 17 for Hadden, 51.2 for Knox and 61.2 for Knox 62.

Blueboy was 2 to 3 pounds lower in test weight than the varieties mentioned. It is resistant to soil-borne mosaic but varies in reaction to races of leaf rust and mildew.

Certified seed should be reasonably plentiful in 1967.

Wheat (cont.)

Fortuna (C.I. 13596) is a hard red spring wheat released jointly by the North Dakota and Montana Experiment Stations and USDA. The new variety was developed in North Dakota in cooperation with the Entomology and Crops Research Divisions, USDA.

Fortuna is an early, awnless, solid-stemmed variety which combines good yielding ability and adequate sawfly resistance. It has been resistant to prevailing races of leaf and stem rust. It is more resistant to lodging than Rescue, Chinook and Sawtana. Fortuna is susceptible to black chaff. Its milling and baking qualities are satisfactory.

Seed stocks for increase are distributed in both Montana and North Dakota.

Leeds (C.I. 13768) is a durum wheat developed by the North Dakota Experiment Station and the Crops Research Division, USDA. It has been tested in North Dakota since 1961 and in regional trials since 1963. In the latter, Leeds excelled both Wells and Stewart 63 in yield, test weight and lodging resistance. Both Leeds and Stewart 63 have been free of stem rust when Wells has rated as high as 35 MR. In plant height Leeds and Wells are similar and some 10 inches shorter than Stewart 63. In heading Stewart 63 is slightly later than the other two varieties. Leeds exceeds Wells in kernel weight by about 25%.

The North Dakota Station will maintain breeders seed.

Lemhi 66 (C.I. 13969) is a stripe rust-resistant soft white spring wheat developed cooperatively by the Idaho Experiment Station-Aberdeen Branch and the Crops Research Division, USDA. It is tall, awnless, has white chaff and closely resembles Lemhi 53. Slightly weaker than Lemhi 53, the new variety is rated moderately resistant to lodging. Lemhi 66 has the Lee gene for stripe rust resistance, and the SR6 gene for stem rust resistance. In absence of stripe rust, it produces grain yields equal to Lemhi 53, but of slightly lower test weight. Milling and baking qualities are similar.

Lemhi 66 was released early to meet the need for a stripe rust resistant variety to replace susceptible Lemhi 53. Fourteen hundred (1400) bushels of certified seed eligible for recertification were offered last spring by the Aberdeen and Tetonia Stations.

Wheat (cont.)

Sheridan (C.I. 13686) is a hard red spring wheat developed by the Montana Experiment Station and the Crops Research Division, USDA. It is recommended for dryland areas in Eastern Montana and for the Northern half of South Dakota. Sheridan has yield and quality advantages over Crim and other recommended varieties in these regions where leaf and stem rust are most often serious.

The new variety is resistant to common races of leaf, stem and stripe rust; and stinking smut. It matures 1 to 2 days earlier than Centana and 1 to 2 days later than Thatcher or Crim. Sheridan grows as tall as Centana and is susceptible to lodging. Heads are long, bearded, with brown chaff. The straw, usually white, will appear purple under certain conditions.

Seed has been distributed by both Montana Seed Growers' Association and South Dakota Foundation Seed Stocks Division.

Sturdy is a hard red winter wheat developed by the Texas Experiment Station and the Crops Research Division, USDA. Characterizing the new variety is its ability to stand up and resist shattering under high production conditions such as irrigation and the 30-40 inch rainfall belts of the State. These are the conditions for which it is recommended. Since the variety's hardiness and drought resistance are questionable, Sturdy should not be grown in States north of Texas.

Sturdy has not yielded significantly more than the best Texas varieties under favorable moisture conditions nor as well in low rainfall areas. In milling and baking qualities, it equals or excels Comanche. The new variety is resistant to present races of leaf rust but susceptible to stem rust.

Breeders' seed is being maintained by the Texas Station.

Oats

Arlington 23 (C.I. 7890), a reselection from Arlington, was released by the South Carolina Experiment Station. Like its parent, the new variety is valued primarily for forage production--in the Piedmont area. Its most important single advantage is resistance to the Helminthosporiums. Superior to Arlington and other available varieties in soil-borne mosaic resistance, the new selection is considered adequately resistant for mosaic infested Piedmont soils. It is susceptible to prevalent races of crown rust and smuts.

Arlington 23 rates about the same as its parent in maturity and height, it usually stands well. Grain yields compare favorably with other varieties in the presence of blight, culm rot and soil-borne mosaic, and it threshes easily.

Foundation and certified seed are available.

Bingham (C.I. 7588) is an unusually stiff-strawed and high-yielding variety developed by the Idaho Branch Experiment Station, Aberdeen, Idaho, with the USDA. It has been outstanding for performance under irrigation in Idaho. The medium late maturity of Bingham does not favor maximum performance under dryland or short season conditions. Under Idaho conditions, Bingham is about 2 days later than Park in maturity and almost a week later than Overland. It is about an inch taller than Park and about 5 inches taller than Overland. Bingham has attractive plump white kernels of medium test weight. It is resistant to Victoria blight and race 8 of stem rust, and moderately resistant to smut and barley yellow dwarf.

Clintford (C.I. 7463) is a spring oat developed at the Purdue Experiment Station and the USDA from the cross of a Clintland type by Milford. The latter variety was brought from Wales for its excellent straw strength. The grain of Clintford is light brownish-white (or yellowish-white in some seasons), large, plump and very high in test weight. The straw is short, large in diameter and comparable in strength to Goodfield or Tippecanoe. Clintford is about two days earlier than Clintland. The panicle is somewhat smaller than with other varieties found in the Cornbelt. Clintford is equal to Clintland in resistance to crown and stem rusts, but inferior to Clintland 60 and Clintland 64. The new variety has resistance to most races of smut, some tolerance to yellow dwarf and is moderately susceptible to Septoria. Because of its short stiff straw and relatively high yielding ability, Clintford is expected to respond well to high fertility levels.

Oats (cont.)

Dawn (C.I. 8029) is a very early, tall, spring oat developed by the North Dakota Experiment Station that combines resistance to both crown and stem rust. It is adapted primarily to the Southeastern part of the State. Similar to Garry in height, Dawn has been less inclined to lodge in State tests but has not done as well in regional tests. Compared with Brave, Dawn yields slightly less; test weights are equal. The new variety is quite resistant to smut, susceptible to yellow dwarf and moderately susceptible to Septoria.

Seed is being increased by the North Dakota Experiment Station.

Diana (C.I. 7921), a development of Purdue Experiment Station and USDA, has been released to plant breeders for germ plasm or commercial use. Distribution to farmers is being delayed because the new variety has not as yet demonstrated superior yielding ability. Of particular interest is the variety's superior resistance to crown rust combined with the ABC genes for stem rust resistance. It has good test weight, stiff straw, and good, if not outstanding, yield capacity. In Indiana yield tests Diana equalled Clintland 64 but was excelled by the recently released Clintford. Limited quantities of seed are available to breeders at the Department of Botany and Plant Pathology, Purdue University.

Mesa (C.I. 8277) is an all-purpose oat released by the Arizona Agricultural Experiment Station and USDA for use in the low altitude, irrigated areas of Southern Arizona. It is a selection from the bulk F₇ of a Kanota x Wild Oat cross.

Simulated pasture forage and grain yields exceed, and hay yields compare favorably with Markton and Palestine (Markton is recommended for forage and Palestine for grain in Arizona.) Compared to Markton and Palestine, Mesa has good standing ability and is intermediate in height and maturity. Vegetative growth is dark green. Mesa is tolerant to yellow dwarf. It has not been tested for rusts and smuts as they are not generally a serious problem in Southern Arizona. Grain is light colored, yellowish red, large and plump with a high test weight. The areas of adaptation and limits of frost tolerance beyond the irrigated areas of Southern Arizona have not been determined.

Oats (cont.)

Nora (C.I. 8163) is a winter oat, a sister selection to Ora (released in 1964), both developed by the Arkansas Experiment Station. Superior winter hardiness is the major reason for the new release--for use in the mountain area of Arkansas. In addition Nora combines excellent resistance to local strains of crown rust (202, 216, and 290), stiff straw, high yield and test weight.

Foundation seed is available through Rice Branch Experiment Station, Stuttgart, Arkansas.

Orbit (C.I. 7811) is a spring oat developed at Cornell. It carries complete smut resistance under New York conditions, resists stem rust and tolerates Septoria blight. Six to ten inches shorter than Garry or Niagra with stiff straw, this medium-season variety stands well for harvest. The kernels are plump, heavy and uniform in ripening. The new variety is expected to be well adapted throughout New York and the Northeast, and in the Northwest. Certified seed is available.

Rapida is a new, very early oat developed by the California Agricultural Experiment Station and the USDA from an F₃ selection (1961) of Wild x Palestine² (Mono) x Wild (58011). It has large white seeds and a strong awn on the primary kernel. It is medium in height and from emergence to heading its growth index exceeds any other small grain variety. In disease reactions it is resistant to crown rust and stem rusts attack it only near maturity and then moderately. Only Kanota has better resistance to yellow dwarf virus. Rapida shatters slightly more than Curt or Indio, lodges less than Indio and is more frost resistant than Indio. Grain yields and hay yields have been less than Curt or Sierra so this variety should be used only where its extreme earliness is an advantage. When summer sown in 1961, Rapida headed 31 days after emergence. In winter it is 7 to 30 days earlier than Indio.

Tyler (C.I. 7679) is a spring oat developed by the Purdue Experiment Station and USDA from the cross Clintland 60 x Mo. 0-205. It is similar to Goodfield and Tippecanoe in height and standing ability, and superior to both in yield. Tyler is about 2 days earlier than Clintland. The grain is brownish-white or light yellow in some seasons, plump and generally good in test weight, though lower than Tippecanoe and Goodfield. It is resistant to some races of crown rust and to current races of stem rust. Tyler is susceptible to smut and the yellow dwarf virus, and moderately susceptible to Septoria. Its short, stiff straw and high yielding ability suggest that Tyler should respond well to high levels of fertility.

Oats (cont.)

Wyndmere (C.I. 7552) is an early, stem rust resistant spring oat developed by the North Dakota Experiment Station. It is suited to Southeastern North Dakota where earliness and rust resistance are required.

Wyndmere is a selection from an Ajax x Ransom cross made in 1955. It has been tested for several years in State trials and the North Central Uniform Oat Nurseries.

In addition to good stem rust resistance, this medium tall variety has shown good yielding ability and test weight. Its crown rust resistance is similar to Garry; in lodging resistance it is better. The kernel is white and somewhat slender and has a high groat to hull ratio.

The North Dakota Station increased seed this year.

Rice

Dawn (C.I. 9534) is the first long-grain rice variety adapted to the Arkansas-Louisiana-Texas area to have resistance to the races of blast known to occur in the U.S. It was cooperatively developed by the Texas Experiment Station and USDA. The Arkansas and Louisiana Stations participated in the testing and seed increase.

Dawn was derived from the cross Century Patna 231 x HO 12-1-1. An early variety, it matures about 2 weeks later than Bluebelle and 2 weeks earlier than Bluebonnet 50. Yields are about equal to Bluebelle in the absence of blast. However, where blast is prevalent, Dawn substantially outyields other long-grain varieties. Kernels of Dawn are similar to those of Belle Patna, Bluebelle and Bluebonnet 50 in size and in cooking and processing characteristics.

Foundation seed was distributed this year in Texas, Arkansas, and Louisiana.

Earlirose stems from a single plant selected from Calrose by Loren L. Davis, N.F. Davis Company, Firebaugh, California with the aim of combining earliness with Calrose type. In field tests Earlirose has matured some two weeks earlier than its parent and been somewhat more productive. Certified seed will be available in 1966.

Rice (cont.)

Nova 66 (C.I. 9481) is an early maturity, smooth-hulled, disease resistant, medium grain rice. Developed cooperatively by Arkansas Experiment Station and USDA, it was released in 1966; hence the number in the name.

In comparison with its parent (see New Crop Varieties No. 5-1963), Nova 66 has a shorter, much stiffer straw than Nova. It is as resistant to diseases, equal in milling yields and slightly higher in grain yields. Both are much more resistant to rice blast than Nato, the dominant, medium grain variety in Arkansas.

The combination of high yield potential and lodging resistance facilitates use of nitrogen to stimulate yield.

Some 800 cwt. of foundation seed was distributed by the Rice Branch Experiment Station this year.

Buckwheat

Pennquad (C.I. 16) is a high-yielding buckwheat with stiff straw developed at the Pennsylvania Experiment Station in cooperation with USDA. The straw is coarse, flowers are white, the seed large and angular ranging from gray with black mottling to black. Pennquad is a tetraploid variety originated from an introduction from Russia. It is adapted to Pennsylvania and other areas with similar conditions.

Foundation seed is available.

Soybeans

Hark is a Hawkeye x Harosoy cross made at the Iowa Experiment Station in cooperation with USDA, jointly tested and released by stations in several nearby States. Hark is similar to Chippewa in standing ability, plant height and oil content of the seed. In southern Minnesota tests it outyielded Chippewa-64 by 2 to 5 bushels, but was 5 or 6 days later in maturity. Hark is susceptible to Phytophthora root rot.

Seed will be available to certified producers for 1967 planting.

Soybeans (cont.)

Kino is a selection from the cross D49-2491 x Clark and is a joint release of the Arizona Agricultural Experiment Station and the Crops Research Division, USDA. The new variety is particularly well adapted to Arizona. It is higher yielding than the commercial variety, Lee, which was the only variety previously recommended for Arizona. Seed is available for 1966 planting from the Arizona Crop Improvement Assoc.

Wilson 6, a hay variety of soybeans, is an early maturing selection from the commercial Wilson variety, released by the Virginia Experiment Station. Its main advantages are uniformity of earliness and seed size together with superior leaf-holding qualities. It is noted that much of the commercial Wilson seed produces a mixture in plant type that mature over a long period.

Foundation seed is available through the Virginia Crop Improvement Assoc.

Safflower

Ute safflower was jointly released by Utah Experiment Station and USDA for use throughout States West of the 100th meridian. In 34 irrigated tests in 13 Western States and 1 Canadian Province, Ute outyielded Gila by 334 pounds. In 39 dryland tests yields were equal. Oil percentage and seed size of Ute were slightly smaller but Ute was higher in test weight. The two varieties are nearly equal in height and maturity.

Characterizing Ute were good seedling vigor, rapid growth, profuse branching, and heads that remain closed at maturity but are easily threshed. The new variety offers increased disease resistance. It has tolerance enough to rust to withstand light infestations, root rot resistance apparently superior to Gila. It is especially resistant to low temperature forms of the disease. Ute has some resistance to fusarium wilt.

Seed was released in 1965 by the Utah Experiment Station.

Alfalfa

Caliverde 65, a California Experiment Station release is going into production this fall. It is similar to Caliverde, a favorite variety before the spotted alfalfa aphid struck, but with advantages of its Lahontan parentage in aphid resistance and tolerance to the stem nematode. In resistance to leaf spot diseases the new variety ranks close to Caliverde and excels Lahontan under some California conditions. Less winter-dormant than Lahontan, Caliverde 65 extends the growing season.

To produce the new variety, selections from the cross California Common 49 x Caliverde were combined with Lahontan. Progenies were carefully screened for resistance to the spotted alfalfa aphid and for tolerance to stem nematode and leaf spot.

Mark II, released by the Cornell Experiment Station, descended from high seed setting plants selected from Narragansett and fields in Wyoming and California. It yields equally with Narragansett and shows better persistence and slightly faster regrowth. The new variety is adapted in the Northeast, in the same area and for the same uses as Narragansett. Some certified seed will be available in 1967.

Mesa-Sirsa is a nondormant, winter-tender synthetic variety developed by Arizona Experiment Station and USDA. The new variety is adapted to the lower desert valley areas of the Southwest where the African, Moapa, and Sonora varieties are grown and where winter forage and stands of two to three years are desired. Mesa-Sirsa is superior to Moapa and Sonora in survival of seedlings exposed to two biotypes of the spotted alfalfa aphid. It appears to be more resistant to mosaic and downy mildew than Sonora.

Foundation seed is available from the Arizona Crop Improvement Association. Limited supplies of certified seed are available for planting this fall.

Washoe, a joint release of the Nevada Experiment Station and USDA, is distinguished by its resistance to four pests viz. pea aphids, spotted alfalfa aphids, stem nematodes and bacterial wilt. A winter-dormant variety with winterhardiness similar to Lahontan, Washoe has equalled or topped Lahontan in forage yields in all areas where the two have been compared except at Davis and Fresno, California. The new variety is regarded as best suited to irrigated areas of the Pacific Coast and Intermountain regions. Limited quantities of foundation seed have been distributed to crop improvement associations and experiment stations in Nevada, Arizona, California, Idaho and Oregon.

White Clover

Tillman white clover was jointly released in late 1965 by USDA and Clemson University. The new variety is indistinguishable from Ladino in seed and plant characters. Its features are high forage production and persistence of stands. In South Carolina trials Tillman has consistently outyielded and outlasted Ladino, La. S-1, Espanso, and Regal.

The new variety is the increase of six lines selected for profuse branching, sparse flowering, persistence of stand, disease resistance and combining ability. These lines are maintained at Clemson. Certified seed is being produced in the Pacific Northwest by arrangement of the South Carolina Foundation Seed Association.

Lespedeza

Yadkin lespedeza was released in North Carolina for certified seed production this year. It was developed by the State Experiment Station in cooperation with USDA. Yadkin is characterized by high seed production accredited to its resistance to tar spot, a leaf disease. It is resistant also to the root-knot nematode. Yadkin matures about 10 days later than ordinary Korean. Seed is being distributed through North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina.

Birdsfoot Trefoil

Dawn trefoil is a synthetic of four clones selected from the Empire variety by the Missouri Experiment Station and USDA. Dawn closely resembles its parent variety. Differences include increased resistance to root rot, improved plant survival in early stages of establishment, longer life, and higher yields. Easier maintenance in permanent pastures and seed fields is expected.

Sweet Lupine

Rancher is a blue lupine resistant to both anthracnose and gray leafspot, particularly adapted to southern Georgia and northern Florida. It is a sweet variety, suitable for grazing and silage as well as soil improvement. Its flowers and seed are white; the foliage is light green with no purple pigmentation of cotyledons or hypocotyls. Rancher was developed by the Georgia Coastal Plain Experiment Station and USDA. Foundation seed is being distributed to producers of certified seed.

Cotton

Blightmaster A-5 is a release of the Texas Experiment Station. It resulted from the bulking in 1962 of three lines drawn from Blightmaster, that consistently outyielded the parent variety. The composite has excelled in subsequent tests. In comparisons with its parent variety, Blightmaster A-5 grows upright, is narrower and slightly taller. Its storm-proofness, high fruiting, and thin burs suit it well to stripper harvesting. Though not early to begin fruiting, the variety fruits rapidly. It matures in the medium range with indeterminate fruiting habit. In Texas, Blightmaster A-5 is recommended for early or mid-season plantings in the Southern half of the High Plains cotton area and in other areas where the stripper is used. Certified seed became available in 1966.

Pima S-3 and Pima S-4 were jointly developed by the Experiment Stations of Arizona, New Mexico and Texas in cooperation with USDA. They are expected to replace Pima S-2 in those sections of these States that produce this extra long cotton. The peculiar advantage of the new varieties is the adaptation of S-3 to the higher elevations (above 2500 feet) and of S-4 to the lower elevations.

At high elevations, Pima S-3 and S-2 are similar in yield and fiber strength. S-3 fruits higher and lodges less than S-2. Hence S-3 is better suited to machine harvesting. Although a little lower in lint percentage, the new variety produces finer fiber and stronger yarn. At lower elevations, Pima S-3 is late, rank, and less productive than S-2.

At the lower elevations, Pima S-4 is more productive and of longer fiber than S-2. S-4 fruits relatively low but continues to fruit throughout the season. At high elevations it fruits too early and too low for efficient machine harvesting unless fertility is high. Compared with S-2, Pima S-4 has slightly lower lint percentage, similar fiber strength and spinning performance, and slightly finer fibers.

Sugarcane

U.S. 59-16-1 is a cold-resistant strain of sugarcane developed cooperatively by the Florida Experiment Station and USDA, now available to growers.

The new strain comes from a search for hardier varieties needed in the colder reaches of the Florida cane-producing area. In addition it appears to offer a good combination of agronomic and juice qualities. However, final evaluation will require wider trial.

Bluestem

Aldous Little Bluestem was released jointly by the Kansas Experiment Station and USDA. Originating from 1935 collections in the Flint Hills, it has been reselected for many generations. Aldous was evaluated as KG-1580. It is a tall, leafy, vigorous, medium-late variety somewhat resistant to rust. Foundation seed is available from the Plant Materials Center, Soil Conservation Service, Manhattan 66502.

Bromegrass

Polar, a product of the Alaska Experiment Station in cooperation with USDA, is characterized by outstanding winterhardiness. It originated from hybrids of smooth bromegrass from the North Central States and arctic bromegrass (*B. pumpellianus*) from Alaska and northern Canada. From the original hybrids first grown in 1949, 16 selections were combined into the new synthetic variety. Alaska scientists point out that Polar has not been adequately appraised for reaction to various diseases since they are not a major factor there.

Indiangrass

Osage Indiangrass, formerly designated Experimental Strain 3, is a synthetic developed from seed collected in 1953. It is tall, leafy, vigorous, late-maturing, rust resistant and a good seed producer. Area of expected use embraces eastern Kansas, western Missouri and northeastern Oklahoma. Foundation seed for certified seed production is obtainable from the Department of Agronomy, Kansas State University, where the variety was released jointly with USDA.

Orchardgrass

Pomar is a dwarf-type orchardgrass, of Russian origin, released in Idaho following extensive testing by the SCS Plant Materials Center at Aberdeen. Pomar is recommended as a cover crop in irrigated orchards; it is not recommended as a forage plant. The variety is described as a good seed producer, easily established, superior in shade tolerance and productive of succulent foliage that deteriorates quickly after clipping. Seed may be obtained through the Idaho Crop Improvement Association, P.O. Box 2601, Boise 83701.

Red Fescue

Arctared is a red fescue distinguished for extreme winterhardiness released jointly by Alaska Experiment Station and USDA in 1965. It traces to a single plant collection made in 1957.

The winters of 1961-62 and 1964-65 eliminated all introduced varieties of red fescue but Arctared survived without injury. The variety produces dense, medium textured turf of medium-green color. It begins growth earlier in the spring than any other variety tested. Arctared establishes turf quickly after seeding due to its rapid germination and superior seedling vigor. No disease has been observed in the variety at the Experiment Station.

Arctared is the first winterhardy turfgrass variety that can be recommended for general use in Alaska and in other northern areas where winter injury to turfgrasses is a serious problem.

Certified seed will be available in 1967.

Creeping Bentgrass

Pennpar creeping bentgrass, a single plant selection from Coos bentgrass was released by the Pennsylvania Experiment Station. It produces a tight putting green, medium dark in color, without severe mottling, graining or thatching. The new variety is rated from tolerant to highly resistant to snowmold, brownpatch, red leafspot, and dollarspot. Recent tests show good tolerance to turf herbicides such as dicamba, mecopron, and siduron.

Limited supplies of stolons can be obtained from the Pennsylvania Experiment Station Seed Service.

Bluegrass

Nugget Kentucky bluegrass is a joint release of Alaska Experiment Station and USDA. It traces to a 1957 bulk seed collection which has been known under the experimental designation of "Hope dwarf." Comparative winterhardiness of the Alaska strains appeared in 1959 when they survived but the commercial varieties winterkilled. Nugget drew particular attention by its low, leafy growth, numerous erect seed heads, dark green color and resistance to powdery mildew and *Helminthosporium* spp. Consistently hardy, Nugget was the only plot in excellent condition when the test ended in 1965.

Nugget germinates rapidly, producing a dense, medium textured, well cushioned, dark green turf. Completely resistant to natural infestations of powdery mildew, it is very resistant to *Helminthosporium* spp. In Alaska, Nugget is as susceptible as other Kentucky bluegrass varieties to snow mold under heavy snow cover.

Certified seed is available.

Centipede Grass

Oklawn centipedegrass was released by Oklahoma Agricultural Experiment Station. This turfgrass variety is drought and shade tolerant to all of Oklahoma with the possible exception of the high plains, and is expected to do well in southern and southeastern States.

Oklawn is a bluish-green, slow growing perennial which spreads by above-ground stolons to produce a medium textured, dense sod which resists bermudagrass and weed invasion. The variety which has high insect and disease tolerance grows well in partial shade and full sunlight on moderately acid, medium-fertile soils.

Planting stock is expected to be in commercial channels available to the public in 1967.

Tall Wheatgrass

Jose tall wheatgrass was developed jointly by New Mexico Agricultural Experiment Station and USDA. Jose is a mass increase of seed collected from an isolated block of spaced plants that trace back to an early Australian introduction native to Eurasia.

This uniform variety is a green, medium-tall bunchgrass which produces less seed and is earlier maturing than other strains tested. Limited observations indicate that the forage production is of high quality and equal to most other seed stocks that are currently available.

Jose is recommended for use in New Mexico and Colorado at elevations up to 7,500 feet as an irrigated hay and pasture grass.

In New Mexico tests, Jose ripens its seed 2 to 3 weeks ahead of Largo. Its uniformity of height and maturity facilitate harvesting, but there is occasional lodging. Seedling vigor of the new variety rated above Alkar and Nebraska 98526 but below Largo and Common. Foundation and certified seed are available in New Mexico.

